STATE - WIDE CONTRACT SPECIFICATIONS

PERFORMANCE PAVEMENT MARKINGS

(Traffic Striping, Marking, Legends and Raised Pavement Markers)

CONTRACT #: T - _____

ITB #: _____

NOTE: ASSOCIATED ALDOT MAINTENANCE BUREAU SPECIFICATION :

MBS 2008 – 12 PM "Performance Pavement Markings

IS INCORPORATED INTO THIS SPECIFICATION BY REFERENCE. COPY ATTACHED MAY OR MAY NOT BE MOST CURRENT VERSION. PLEASE SEE INVITATION TO BID TERMS & CONDITIONS FOR INTERNET ACCESS AVAILABILITY FOR MOST CURRENT INFORMATION.

1.0 **CONTRACTOR REQUIREMENTS – GENERAL**

1.1 PURSUANT TO SECTION 34-8-1(a) OF THE CODE OF ALABAMA, EACH VENDOR MUST SUBMIT WITH THEIR BID PROOF OF LICENSING THROUGH ALABAMA STATE BOARD OF LICENSING FOR GENERAL CONTRACTORS, WITH APPROVED MAXIMUM BID LIMITS OF NO LESS THAN $500,000.00. **FAILURE TO COMPLY WILL BE CAUSE FOR REJECTION OF THE BID.** A COPY OF THE VENDOR'S CURRENT YEAR'S LICENSE WILL EXPEDITE THE EVALUATION PROCESS. CONTRACTOR MUST BE LICENSED IN AN AREA OF WORK APPROPRIATE TO THE WORK SCOPE APPLICABLE TO THIS BID PROCESS. CONTRACTOR MUST BE LICENSED AS A PRIME CONTRACTOR.

1.2 EACH VENDOR MUST SUBMIT WITH THEIR BID PROOF OF LIABILITY INSURANCE IN THE MINIMUM AMOUNT OF $2,000,000 PER OCCURRENCE, $5,000,000 AGGREGATE. EACH VENDOR SHALL FURTHER PROVIDE PROOF OF WORKMAN'S COMPENSATION INSURANCE SUFFICIENT TO SATISFY ALL LEGAL REQUIREMENTS OF THE STATE OF ALABAMA. **FAILURE TO PROVIDE THIS DOCUMENTATION WITH THE BID PACKAGE WILL DELAY EVALUATION OF THE BID.**

1.3 IN ACCORDANCE WITH SECTION 41-16-29 OF THE CODE OF ALABAMA, THE SUCCESSFUL BIDDER ON THIS SOLICITATION IS RESTRAINED FROM ASSIGNING OR SUB-CONTRACTING ANY PORTION OF THE WORK UNDER THIS CONTRACT WITHOUT THE PRIOR AUTHORIZATION OF THE REQUISITIONING AGENCY AND THE AWARDING AUTHORITY.

1.3. ATTENTION IS DRAWN TO THE FACT THAT THIS WORK WILL BE PERFORMED UNDER TRAFFIC CONDITIONS REQUIRING SPECIAL CARE TO EXPEDITE THE WORK AND PREVENT UNDUE HAZARDOUS CONDITIONS. **TRAFFIC CONTROL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)** AND CHAPTER VI OF THE MOST CURRENT EDITION OF THE **STANDARDS AND GUIDES FOR TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY AND INCIDENTAL MANAGEMENTS OPERATIONS.** ATTENTION IS DRAWN TO THE REQUIREMENTS OF SUB-ARTICLE 630.03(D) OF THE CURRENT SPECIFICATION. SPECIFIC

AREAS WILL REQUIRE DIFFERENT LEVELS OF TRAFFIC CONTROL AS INDICATED IN THE **MUTCD.** ALL CONTRACTOR EMPLOYEES WHO ARE EXPOSED TO THE RISKS OF MOVING ROADWAY TRAFFIC OR CONSTRUCTION EQUIPMENT MUST WEAR HIGH-VISIBILITY APPAREL MEETING THE STANDARDS OF ANSI 107-2004 CLASS 3. THE TRANSPORTATION DIRECTOR, ASSISTANT DIRECTORS, CHIEF ENGINEER, ASSISTANCE CHIEF ENGINEERS, STATE MAINTENANCE ENGINEER, ASSISTANT STATE MAINTENANCE ENGINEERS, DIVISION ENGINEERS, DISTRICT ENGINEERS, DIVISION MAINTENANCE ENGINEERS, OR PROJECT ENGINEERS SHALL HAVE THE RIGHT TO SUSPEND WORK PERFORMANCE OF A CONTRACTOR FOUND TO BE IN NON-COMPLIANCE ON A PARTICULAR WORKSITE.

NOTE:

MORE EXTENSIVE TRAFFIC CONTROL INVOLVING THE SET-UP AND REMOVAL OF LANE CLOSURE PROTOCOLS AS NECESSARY WILL BE INVOICED SEPARATELY UNDER THE APPLICABLE PAY ITEMS PROVIDED IN THIS CONTRACT.

2.0 PERFORMANCE

2.1 ALL WORKMANSHIP SHALL BE OF A PROFESSIONAL QUALITY AND STANDARD AS GENERALLY ACCEPTED IN THE TRADE. ALL WORKMANSHIP IS SUBJECT TO INSPECTION AND APPROVAL BY THE MAINTENANCE ENGINEER, OR HIS DESIGNEE .

2.1 THE PERFORMANCE OF ANY WORK UNDER THESE SPECIFICATIONS WILL NOT BE DEEMED COMPLETE UNTIL THE CONTRACTOR HAS SATISFACTORILY REMOVED ALL DEBRIS AND CLEANED UP THE WORK SITE. AT NO TIME DURING THE PERFORMANCE OF WORK WILL MATERIALS, DEBRIS OR TRASH BE ALLOWED TO ACCUMULATE IN SUCH A MANNER AS TO ENDANGER THE SAFE PERFORMANCE OF THE WORK OR THE SAFE USE OF THE ADJACENT HIGHWAY BY THE TRAVELING PUBLIC.

2.2 PRICES TO INCLUDE ALL EQUIPMENT, MATERIALS, TOOLS, TRANSPORTATION, LABOR AND OTHER NECESSARY INCIDENTALS FOR THE COMPLETION OF THIS WORK IN AN APPROVED AND SATISFACTORY MANNER. NO WORK WILL BE DONE WITHOUT PRIOR APPROVAL AND NOTIFICATION BY THE DISTRICT ENGINEER AT LOCATIONS DESIGNATED.

3.0 ORDERING PROCESS

3.1. EACH DIVISION OR BUREAU WHO WISHES TO CONTRACT FOR SERVICES FROM THIS CONTRACT WILL SUBMIT THE APPROPRIATE REQUISITION INDICATING LOCATIONS AND ROADWAY SECTION FOR EACH ITEM OF WORK. A PURCHASE ORDER WILL BE GENERATED BY THE ALABAMA DEPARTMENT OF FINANCE AND DELIVERED TO THE VENDOR BY U. S. MAIL.

3.2. EACH INDIVIDUAL PURCHASE ORDER WILL INCLUDE SPECIFIC CONTACT PERSON AND INFORMATION FOR EACH PROJECT.

3.3. UPON COMPLETION, INSPECTION AND ACCEPTANCE OF ALL WORK INCLUDED ON A SPECIFIC PURCHASE ORDER, THE CONTRACT VENDOR WILL SUBMIT AN INVOICE TO THE "BILL TO" AGENCY LOCATION INDICATED ON THE PURCHASE ORDER.

NOTES:

ALL ITEMS BID MUST MEET LATEST ALDOT STANDARD SPECIFICATIONS AND DRAWINGS.

INFORMATION ON OBTAINING ALDOT STANDARD SPECIFICATIONS AND DRAWINGS MAY BE FOUND ON THE PROJECT LETTING INFORMATION LINK ON THE ALDOT WEBSITE, OR BY FOLLOWING THE WEBLINK LISTED BELOW:

HTTP://WWW.DOT.STATE.AL.US/DOCS/BUREAUS/OFFICE+ENGINEER/PROJECT+LETTING/PROJECT+LETTING.HTM

WHERE APPLICABLE, ITEMS MUST BE PREQUALIFIED BY ALDOT AND/OR NCHRP-350 COMPLIANT OR NTPEP COMPLIANT.

INFORMATION ON PRODUCT EVALUATION AND PREQUALIFICATION MAY BE FOUND ON THE ALDOT MATERIALS & TESTS BUREAU'S LINK ON THE ALDOT WEBSITE, OR BY FOLLOWING THE WEBLINK LISTED BELOW:

HTTP://WWW.DOT.STATE.AL.US/DOCS/BUREAUS/MATERIALS+AND+TESTS/TESTING/MSDSAR/MSDSAR_MAIN.HTM

INFORMATION ON MARKINGS SPECIFICATIONS AND INSTALLATION SPECIAL PROVISIONS OF THIS CONTRACT CAN BE FOUND ON THE FOLLOWING WEBLINK:

WWW.DOT.STATE.AL.US/DOCX/BUREAUS/MAINTENANCE/MAINTENANCE+BUREAUS+PUBLICATIONS.HTM

ALABAMA DEPARTMENT OF TRANSPORTATION
Specification

Performance Pavement Markings

MBS 2008-12 PM

Section 1.0 **PAVEMENT STRIPING, MARKING AND RPM MANAGEMENT SCOPE OF SERVICES**

1.1 Scope of Work

The work under this Section consists of the installation of traffic control pavement striping, markings and raised pavement markers in accordance with the details shown on the Alabama Department of Transportation standard plan sheets. This Section shall also cover the maintenance and bonding through the performance period of the pavement markings. The Department will award this contract on an all or none basis. The Contractor must submit a bid on all items or the bid will be deemed incomplete and thus rejected. This work shall include installation of traffic control pavement striping, markings and raised pavement markers on an individual work order basis as determined by Alabama Department of Transportation. Each individual work order shall be issued to the Contractor and shall be completed in the time specified for that work order.

1.2 General Requirement

The Department requires all work to be performed to current Standards and Specifications throughout the contract duration, as may be updated throughout the life of the contract. The Contractor will manage pavement striping and marking assets within the work order project limits and will perform work that produces end results in accordance with Department Specifications (including all Supplemental Specifications and Special Provisions), Design Standards, Standard Maintenance Special Provisions, Maintenance Activity Standards, Procedures, Handbooks, Guides, and Manuals, including the Manual on Uniform Traffic Control Devices (MUTCD), American Society of Testing and Materials (ASTM), and Code of Federal Regulations (CFR), in effect at the time of the performance of the specific work, and consistent with the Department's statewide maintenance practices.

The Contractor shall adhere to all federal, state and local laws pertaining to proper health and safety measures to ensure safety for the traveling public, Department employees, Contractor employees, and Subcontractor employees.

All work on this project shall conform to the Alabama Department of Transportation, Standard Specifications for Highway Construction 2008 or current edition. Hereinafter when used in this specification, "ALDOT Standard Specifications", shall mean the latest edition of the above referenced document including Special Provisions applicable at the time of invitation to any bid opening referencing MBS 2008-12 PM.

In case of discrepancy between this Specification and the standard provisions, this Specification shall prevail.

Contractor shall provide a performance bond equal to $1 million dollars during the term of the contract. In addition the contractor will be required to provide a warranty bond for each purchase order placed by the Department. The value of the warranty bond shall be equal to the purchase order invoice. The term of the warranty bond will be consistent with Bonding Period as listed in section 3.2 Pavement Markings Performance Criteria for Bonded Period. The warranty bond would survive the term of the contract.

The Contractor will comply with the Department's lane closure restrictions/requirements at the time the work order is issued. In some locations this may require work to be performed at night.

All claims and disputes by the Contractor will be resolved in accordance with the Department Standard Specifications and revisions thereto.

Section 2.0 Materials Specifications & Performance Standards

2.1 General

Materials shall produce an adherent, retroreflective pavement striping, miscellaneous pavement markings and raised pavement markers (RPM) capable of resisting deformation by traffic. The requirements specified herein and the performance requirements of this Section will apply for any new application throughout the duration of the warranty period regardless of the type of formulation used. Contractor will have option to select materials from List V-4 or V-2 as appropriate of the Materials, Sources, and Devices with Special Acceptance Requirements (MSDSAR), unless otherwise authorized in writing by an ALDOT designated engineer.

2.2.1 Materials

All pavement marking materials shall meet the ALDOT Standard Specifications, specifically Division 800 Traffic Marking Materials and Division 700 Traffic Control Devices and Highway Lighting.

Warranted materials shall be furnished in accordance with the requirements given in Sections 856 and 857 for the following class and type shown in Table 2.2.1a:

Table 2.2.1a Warranted Traffic Stripe, Markings, Legends, & RPM

CLASS OF TRAFFIC STRIPE, MARKINGS, & LEGENDS		
MATERIAL	CLASS	Type
Warranted Traffic Marking Material	W	A
Markings & Legends	2 & W	A
High Build Paint	1H	A
Thermoplastic Material	2	A
Raised Pavement Markers	A-H	1-A, 1-B, 2-A, 2-B, 2-C, 2-D, 2-E

2.2.2 Contractor Selection of Materials

The Contractor shall have the option to select from the ALDOT MSDSAR V-4, V-2 or use ALDOT approved alternative material. Bonded materials shall meet the requirements in the ALDOT Standard Specifications, specifically Division 800 Traffic Marking Materials and Division 700 Traffic Control Devices and Highway Lighting and shall be furnished in accordance with the requirements given in Sections 856 or 882 for the class and type shown in Table 2.2.1a, above. The use of any materials not on the approved product list must be approved by ALDOT prior to placement of the material.

2.3 Initial Performance Acceptance Criteria

2.3.1 Retroreflectivity of Class W, 1H, 2, striping, markings, and legends

The initial retroreflectivity shall be measured by the Contractor in accordance with ASTM E 1710, "Standard Specifications for Measurement of Retroreflective Pavement Marking Materials with CEN-Prescribed Geometry Using a Portable Retroreflectometer". Measurement shall be made using a portable retroreflectometer during the installation or alternatively using a mobile retroreflectometer within 45 days of installation. The initial retroreflectivity of all newly placed traffic stripe and markings shall meet the minimum requirements in the ALDOT Standard Specifications, namely, Division 700 Traffic Control Devices and Highway Lighting, and the specifications of the contract provisions.

Initial retroreflectivity requirements will not apply to transverse lines, cross-hatches, diagonals, messages, and symbols.

2.3.2 Color of Class W, 1H, 2, striping, markings, and legends
All pavement markings shall meet the requirements for daytime and nighttime color in accordance with ASTM D 6628-03 Standard Specification for Color of Pavement Marking Materials. Samples will be collected by Division personnel at the time of installation. These samples will be sent by Division personnel to Materials and Test laboratory to confirm compliance to ASTM D 6628-03. One sample of each color and each product type will be collected for testing.

2.3.3 Initial Performance Acceptance Criteria Class A-H
Raised Pavement Markers will be selected from the list V-2.

Section 3.0 Performance Standards & Acceptance Criteria for Bond Period

3.1 Measurement Zone

3.1.1 Definition
A measurement zone is defined as one mile segment of pavement striping within the project scope. In each measurement zone, the measurements of each longitudinal line (broken, solid, dotted, lane drop, etc.) shall be made in the direction of traffic flow, except on the centerline of two-lane roads where the required number of measurements will be made in each direction. The measurements shall exclude all symbols, legends, and transverse lines.

Performance of traffic striping within a measurement zone is defined as the average of a minimum of 10 readings ($1/10^{th}$ mile intervals) collected by a mobile reflectometer per line measured in a one mile segment. Measurements will be performed according to the requirements of ASTM E 1710-05.

3.1.2 Frequency of Measurement
Measurements shall be made within 45 calendar days (See Section 2.3.1) of the initial installation and annually thereafter within (±) 30 days of the anniversary date of acceptance.

3.2 Pavement Markings Performance Criteria for Bonded Period
All pavement striping on the roadway including ramps shall be reflective and meet the reflectivity performance specifications shown in Table 3.2 Class of Markings.

Table 3.2 CLASS OF MARKINGS

CLASS	MATERIAL		Retroreflectivity Level (mcd/lx/m^2)	Performance Bonding Period (Years)
W	Warranted Traffic Marking Material		130	6
1H	High Build Paint		100	2
2	Thermoplastic Material	@ 3 years	150	5
		@ 5 years	100	
2 & W	Traffic Control Markings and Legends		*Visual/road presence	2
A-H	Raised Pavement Marker		*Visual/road presence	2

* No retroreflectivity requirement

3.2.1 Raised Pavement Marker Performance Criteria for Bonded Period

The performance of raised pavement markers shall include road presence and visual retroreflectivity. The raised pavement markers shall be visible at night at a distance of 320ft when viewed from a passenger vehicle using low beam headlight illumination. If more than 2 consecutive 80ft-center markers per line or 3 consecutive 40ft-center markers per line are not visible within a measurement zone as defined in Section 3.1.1, the failed markers shall be replaced within 30 calendar days from the inspection date.

The road presence of raised pavement markers shall be monitored annually for adhesion failure in accordance with the calculation shown below. If more than 2 consecutive 80ft-center markers per line or 3 consecutive 40ft-center markers per line are missing within a measurement zone, the missing markers shall be replaced within 30 calendar days from the inspection date. The markers shall have at least 50% of lens area functional to count as present.

Road Presence Calculation

Road presence is calculated in the following manner:

(1) Establish the total number of markers required by ALDOT Standard Specification and Drawings in the measurement zone (T)

(2) Count the markers in place (R)

(3) Calculate presence percent (%)

Road Presence (%) = R/T*100

If the raised pavement marker failure rate for either road presence or visual reflectivity exceeds 50% of the total, the entire marker inventory shall be replaced according to ALDOT Standard Specifications. The Department will specify if the old markers must be removed by the contractor prior to placement of new markers.

3.2.3 Color During Bonded Period

The color of traffic striping and traffic control markings for Class W, 1H, 2 must be visually acceptable as determined by the ALDOT engineer. If there's a discrepancy in interpretation, the suspected areas shall be measured by the contractor according to ASTM D 6628-03 for color. Failures representing sections of markings shall be replaced according to the provisions of the Standard Specifications

There is no color requirement for raised pavement markers.

3.2.4 Transverse, Gore, Wide Lines, and Miscellaneous Markings Durability Performance Criteria (Class 2, Class W)

The markings shall maintain a minimum road presence of 77% for a two year period per ASTM D913 (Standard Test Method for Evaluating Degree of Resistance to Wear of Traffic Paint).

The markings will be evaluated for road presence according to the criteria of ASTM D913. ASTM D913 includes evaluation categories and reference photographs for road presence of in service pavement markings. Categories include road presence levels at 97%, 92%, 77%, and 60% for pavement markings:

- Any Markings and Legends showing wear-through exceeding 23% of the total area of the marking or legend shall be repaired or replaced.
- Markings and Legends shall be maintained to have 92% road presence as a cumulative total of the entire marking inventory per location.
- A plan for material selection and installation procedure shall be submitted and approved by the Department prior to performing any replacement or repairs.

3.3 Notice of Deficiencies

Upon notification of a deficiency during the warranty period, the Contractor shall correct the deficiency by reapplication of new markings in accordance with ALDOT Standard Specifications. When the Department determines that it is necessary to remove a deficiency, the Contractor shall use a method that will minimize damage of the pavement and which will eliminate the striping or marking visually for both day and night time conditions. During the warranty period, deficiencies shall be corrected following the procedures set forth in Section 4.3.2.1, using the original type material, unless an equal or more appropriate material under the circumstances (i.e. pending resurfacing contracts) is submitted to and approved by the Department. If the Contractor fails to correct the deficiencies as specified, the Department has the authority to have the deficiencies corrected by any other lawful means, including requiring the surety to correct the deficiencies. The Contractor shall be responsible for the cost of such corrective work. All work and materials required for correction of deficiencies shall be inclusive in the fixed contract price.

Section 4.0 4.0 Pavement Markings Asset Management

4.1 Pavement Markings Asset Inventory Database

Pavement markings asset inventory components shall include geo-spatial referenced asset locations of long line segments and discrete markings. The minimum requirement for pavement marking inventory components is shown in Table 4.2.

Table 4-2 PM inventory components

Inventory Data	
(1)	Geo-Spatial Asset Location a. Long line stripes b. Transverse markings , symbols, and legends
(2)	PM Attribute a. Broken/solid lines b. Wide stripings c. Symbols, Legends d. Special markings or stripings
(4)	Documentation a. Photo d. Mapping e. Data file f. Website

4.2 Data Access, Management, and Reporting

Contractor shall provide, through the term of the contract, an Internet-based website for tracking pavement marking installation and performance monitoring. The website shall include all specific requirements outlined in this specification and shall be accessible by Department designated individuals only, by use of an interactive password security system. Upon completion of this contract, the contractor shall deliver to the Department the project tracking database. All reports must be reviewed and certified by a licensed professional engineer prior to submission to ALDOT.

4.2.1 Website Components

Interactive Website Specifications

1. The website will include an interactive map of the project area, indicating the location of each project feature. The interactive map will include navigation capabilities to pan and zoom to various locations and resolutions on the map.
2. The website will provide click and drag capability to allow the user to select a project feature or features to obtain information about that feature. The data will be displayed in tabular format per the data requirements below.
3. The base map will indicate all applicable roadways within ALDOT right-of-ways and will designate such roadways by proper name. Base map GIS data of the project

area will be of sufficient accuracy for the project. The base map data will be provided by ALDOT in an ArcGIS-compatible data format.

4. The website will be a secure site, accessible from a typical personal computer with internet access, and will be accessible by password only. Passwords will be granted to individuals at ALDOT's discretion.

5. The website will include a communication option to directly send an email to Contractor to make an inquiry about any of the pavement markings, schedule for completion, or other information included in the project.

4.2.2 Data Requirement

A. Data reported on the website for each work zone will consist of the following:

1. Hwy#
2. Job#
3. Reported Footage installed
4. Field Supervisor
5. Status
6. Start Date
7. Finish Date
8. Date Evaluated

B. Site locations for each feature will be shown on the base map and plotted using GPS coordinates.

C. Pavement markings will be identified on the map with a symbol that is color-coded according to pavement marking type.

D. A legend will be provided identifying the color code for each.

E. The data included in item A above will be downloadable from the website in a tabular format that can be pasted into any word processing or spreadsheet software.

F. Contractor will send the complete GIS database to ALDOT through electronic means periodically and as requested by ALDOT.

G. The website will be fully functional within thirty working days of the notice to proceed on the contract and after receipt of ALDOT-provided base map data.

H. Data on the website will be updated both annually and when work is performed under this contract for ALDOT to report progress of work on the contract.

4.3 Annual Submittal of Certification of Performance

4.3.1 Certification of Performance

A "Certification of Performance" shall be submitted annually for the duration of the bonded performance period as defined in Section 3.2 above. The Contractor shall submit the Certificate of performance annually.

The pavement markings shall be certified as meeting the performance requirements for reflectivity and durability. The Certification period begins on the date the Department accepts all pavement markings. The certification shall be submitted annually within 30 calendar days of the anniversary date of the certification.

The "Certification of Performance" shall be submitted annually to the Maintenance Engineer in electronic format, through the use of an Internet-based data management method in accordance with the requirements of this specification. The data reporting format shall be approved by ALDOT engineer.

4.3.2 Annual Assessment cycles

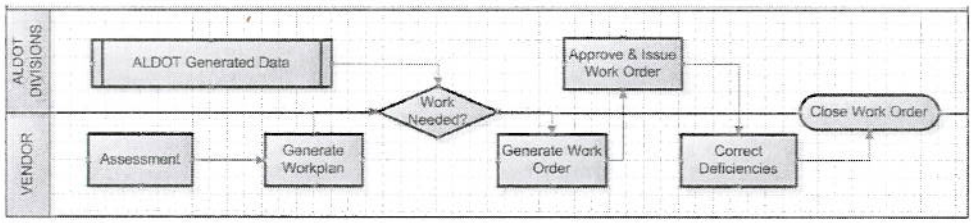

Figure 4.3.2

The contractor shall be required to generate and update inventory (markings type, conditions) on an annual basis. The deficient assets as defined in Section 3 Performance Standards & Acceptance Criteria for Bond Period will be assessed and quantified on an annual basis. The process of assessment is shown in Figure 4.3.2.

4.3.2.1 Contractor Notification and Correction of Deficiencies
The Contractor shall notify the Division Maintenance Engineer if a deficiency occurs during the bonding period. The Contractor shall submit a plan for the performance of the work to the Division Maintenance Engineer within 14 calendar days before the work will begin. Work shall not begin until the Division Maintenance Engineer informs the Contractor in writing that the plan for the work required under the bond is complete. Work shall commence not more than 30 days after approval of the work plan by ALDOT

4.3.2.2 Department Notification
The Division Maintenance Engineer will notify the Contractor if a deficiency occurs during the bonding period. The Contractor shall submit a plan for the performance of the work to the Division Maintenance Engineer within 14 calendar days before the work will begin. Work shall not begin until the Maintenance Engineer informs the Contractor in writing that the plan for the work required under the bonding is complete. Work shall commence not more than 30 calendar days after approval of the work plan by ALDOT.

4.3.3 Annual Maintenance /Repair Quantity
The contractor shall quantify the annual work quantity in the proposed annual work order using the data from the annual assessment. The work quantity shall include the following:

a. Route
b. Asset description by type
c. QTY
d. Unit

4.3.4 Work Order Release Process
ALDOT representative shall verify that the work quantity in the proposed annual work order will address all deficient markings and markers. Once the work order is approved or agreed upon, the contractor shall initiate the maintenance activities within 14 calendar days from the date of approval.

Section 5.0 Payment, Terms and Conditions

5.1 Payment Items
The accepted Traffic Control Markings or Legends will be paid for at the contract unit price bid which shall be full compensation for the item complete in place and includes the cleaning of the pavement, furnishing and applying the markings or legends, and for all materials, equipment, tools, labor and incidentals necessary to complete the work. Vacuuming of material debris, when required by the engineer as part of Removal Pay Item work, will be a subsidiary obligation of the Removal Pay Item.

The accepted Traffic Control Markings or Legends Removed will be paid for at the contract unit price bid which shall be full compensation for the item complete in place and includes traffic control for removal, all necessary materials, equipment, tools, labor and incidentals necessary to complete the work.

Pricing of all traffic control pavement striping is based on a line width of five (5) inches. Payment will be based on a proportional adjustment for actual width of installed lines. For example, a 4-inch line will be paid at a rate of 4/5 times the bid price. Raised pavement marker shall be price by each.

Traffic control for lane closure charges will NOT apply to installations using moving traffic control operation.

Class 1 and 2T stripe are not bonded and are subject to ALDOT standards and specifications.

The mobilization pay item specification is based upon Table 5.1 and the following: Should a purchase order amount fail to satisfy the minimum amount shown, the mobilization pay item shall be included in the subject purchase order. The mobilization pay item shall be paid for each Specified Material in the Table which falls below the minimum amount; any purchase order where the total of pay items of the same specified material exceeds the quantity shown in Table 5.1, mobilization shall not be paid. Any purchase order change request resulting in an order above the minimum amount voids the mobilization payment for the respective specified material.

Table 5.1 Minimum Amount to Avoid Mobilization Pay Item(s)

Specified Materials	*Minimum Amount Striping / RPM	Minimum Amount Markings, Symbols, and legends
Class 1 (Paint)	3 Mile or 3,000 LF	1500 SF
Class 1H (High Build)	5 Mile or 3,000 LF	1500 SF
Class 2 or 2T (Thermo)	4 Mile or 7,500 LF	2500 SF
Class W (Tape or PolyCarb)	5 Mile or 5,000 LF	2,500 SF
RPM	250 EA.	N/A

* Mile applies to pay items with the same unit; LF applies to pay items with the same unit.

5.2 Terms

5.2.1 Subject to Section 5.2.4 of this section, Contractor's total compensation to be paid during the term of the contract will be made in accordance with the Payment Schedule as set forth in Section 5.

5.2.2 Contractor shall submit invoices to the Department for the Services completed in accordance with this Agreement. All invoices are due within thirty days after invoice date. Payment will be based upon the quantities measured by the department.

5.2.3 If the Department disputes any portion of a Contractors invoice, then the Department will: (a) process for payment any amount not in dispute by the due date; and (b) within five business days after receipt of that invoice, inform Contractor in writing of the disputed amount and the specific reason(s) for withholding payment. On Contractor's receipt of this written notice, the Parties will work together in good faith to resolve such

disputes in a prompt and mutually acceptable manner. The Department agrees to process for payment any disputed amounts within five business days after the issues have been resolved.

5.2.6 The Department will determine and publish a monthly "Fuel Index" (I_m) utilizing the average area terminal price reports for regular unleaded gasoline and No. 2 fuel of the "Platts Oilgram Price Report" published during the week in which the first day of the month occurs.

The Base Fuel Index (I_b) for the project will be the monthly fuel index published for the month in which the bids were opened for the project.

The contractor will establish a line item fuel factor as an average percentage of operating costs. This fuel factor will be used regardless of the material or service type of the work order and will remain unchanged during the term of the contract.

In the event the Base Fuel Index (I_b) increases during the contract period, the Department will increase the payment to the contractor consistent with the change in the Base Fuel Index (I_b).

Example:
Work order value $20,000.00
I_b Base Fuel Index = 3.00
I_m Fuel Index for Current Month = 3.50
Fuel Factor = 10%
Department calculates payment $((I_m - I_b)/ I_b)$ X work order invoice X Fuel Factor
($3.50-$3.00) / $3.00) X $20,000.00 X 0.10 = $333.33

In the event the Base Fuel Index decreases during the contract period the contractor will credit the Department consistent with the change in the Base Fuel Index (I_b).